



# Form 4/PSOW

## Internal assessment cover sheet: group 4 (except design technology)

SUBMIT TO: **MODERATOR**

ARRIVAL DATE: **20 APRIL 2009**

SESSION: **MAY 2009**

SCHOOL NUMBER: 

0	0	1	2	2	3
---	---	---	---	---	---

NAME: **INTERNATIONAL SCHOOL SINGAPORE (ISS)**

SUBJECT: **PHYSICS**

LEVEL: **HL**

NAME: **E. X. Ample**

SESSION NUMBER: **0 0 1 2 2 3 0 9 9**

Date(s)	Outline of experiments/investigations/projects	ICT	Topic option	Time (hrs)	Levels awarded			
					D	DCP	CE	PS
010109	Specific heat capacity - method of mixtures - SL syllabus		3	1.5		6	3	
010109	Inquiry Extravaganza (Design Experiment on Solar Power) - SL/HL syllabus		8	2.0	4	5	5	
010109	Factors affecting the frequency of a standing wave in a string (Design experiment using Audacity) - SL syllabus	2	11	1.0	5			
010109	Determining the Power of an Immersion Heater (Measuring time to heat water $\Delta T$ to calculate Power) - SL syllabus		5	1.0			5	

Please fill in the ICT column using the numbers below to show when the student experienced each of these applications:

1 – Data logging, 2 – Graph plotting software, 3 – Spreadsheet  
4 – Database, 5 – Computer model/simulation

Group 4 project mark for PS

6/6

Summative mark for MS

6/6

Two highest levels achieved

4/6

6/6

5/6

5/6

5/6

5/6

**Total**

**42/48**

This total must also be entered on IBIS

Moderator	/6	/6	/6	Senior Moderator	/6	/6	/6
	/6	/6	/6		/6	/6	/6

**Teacher:** Mr. Rowdy BOEYINK

**Signature:**

**Date:** 25 March 2009

**Candidate declaration:** I confirm that this work is my own work and is the final version.

I have acknowledged each use of the words or ideas of another person whether written, oral or visual.

**Candidate's Signature:**.....

**Date:** .....



# Form 4/PSOW

## Internal assessment cover sheet: group 4 (except design technology)

SUBMIT TO: MODERATOR

ARRIVAL DATE: 20 APRIL 2009

SESSION: MAY 2009

SCHOOL NUMBER: 

0	0	1	2	2	3
---	---	---	---	---	---

NAME: INTERNATIONAL SCHOOL SINGAPORE (ISS)

### International Baccalaureate

### Form 4/PSOW (reverse)

SCHOOL NAME: INTERNATIONAL SCHOOL SINGAPORE (ISS)

SUBJECT: PHYSICS      LEVEL: HL      NAME: E. X. Ample      SESSION NUMBER: 0 0 1 2 2 3 0 9 9

Date(s)	Outline of experiments/investigations/projects	ICT	Topic/ option	Time (hrs)	Levels awarded		
					D	DCP	CE
010109	Verifying Snell's Law (Calculating refractive index using Perspex slabs and light box verifying Snell's Law) - SL syllabus		4	1.5		3	3
010109	V/I Characteristics in circuits (Phet Applet on circuits in parallel and series using AC and DC) - SL syllabus	5	5	1.0			
010109	Determining the Power of an Immersion Heater (Measuring time to heat water $\Delta T$ to calculate Power) - SL syllabus		5	1.0			5
010109	Investigating Bar Magnets (measuring field strengths due to a bar magnet, using Phet Applet) - SL syllabus	5	6	1.0			
010109	Investigating Electromagnets (measuring field strengths due to a an electromagnet, using Phet Applet) - SL syllabus	5	6	1.0			
010109	Determining the Half Life of a Radioactive Source (Using an Excel database and Analysis tools) - SL/HL syllabus	4	7	3.0			
010109	Group 4 Project: Condoms		NA	10.0			
010109	Focal length of a converging lens (Using lens formula to find focal length of various convex lenses) - HL syllabus		6	1.5		4	
010109	Determining $\lambda$ of a Helium-Neon Laser (Investigating Young's experiment using a diffraction grating) - HL syllabus		6	1.5			
010109	Making an electromotor (assembling an electromotor with 'basic' components) - HL syllabus		12	1.5			
010109	Inquiry Extravaganza (Design Experiment on any of the topics studied) - SL/HL syllabus		NA	2.0	4	5	5
010109	Investigating Wind Power (Power Output versus Blade radius and Blade Area) - SL syllabus	4	8	1.0			
010109	Resolving Power of the Eye (Find minimum resolving power for spatial separation of lines versus distance) - SL syllabus		11	1.0		4	4
010109	Factors affecting the frequency of a standing wave in a string (Design experiment using Audacity) - SL syllabus	2	11	1.0	5		



# Form 4/PSOW

## Internal assessment cover sheet: group 4 (except design technology)

SUBMIT TO: MODERATOR

ARRIVAL DATE: 20 APRIL 2009

SESSION: MAY 2009

SCHOOL NUMBER: 

0	0	1	2	2	3
---	---	---	---	---	---

NAME: INTERNATIONAL SCHOOL SINGAPORE (ISS)

International Baccalaureate				Form 4/PSOW (reverse)			
SCHOOL NAME: INTERNATIONAL SCHOOL SINGAPORE (ISS)							
SUBJECT: PHYSICS      LEVEL: HL      NAME: E. X. Ample      SESSION NUMBER: 001223099							
Date(s)	Outline of experiments/investigations/projects	ICT	Topic/ option	Time (hrs)	Levels awarded		
					D	DCP	CE
010109	Error analysis using a microscope slide - SL syllabus		1	1.0			
010109	Error analysis: paperclips and magnets - SL syllabus		1	1.0			
010109	Vector addition using Pythagoras - SL syllabus		1	1.5			
010109	Pendulum length and time period - SL syllabus		2	1.5			
010109	Finding g by a variety of methods - SL syllabus		2	2.0			
010109	Investigating Springs - SL syllabus		2	2.0			
010109	Estimating the distance to a plane - SL syllabus		1	1.0			
010109	Verifying the law of conservation of momentum - SL syllabus		2	1.5			
010109	Investigating the change in weight during a lift journey - SL syllabus		2	1.0			
010109	Error analysis using a microscope slide - SL syllabus		1	1.0			
010109	Error analysis: paperclips and magnets - SL syllabus		1	1.0			



**SUBMIT TO: MODERATOR**

ARRIVAL DATE: 20 APRIL 2009

SESSION: MAY 2009

SCHOOL NUMBER: 

0	0	1	2	2	3
---	---	---	---	---	---

NAME: **INTERNATIONAL SCHOOL SINGAPORE (ISS)**Vade Mecum 2008 Experimental Sciences